



BIKE SAFETY TASK FORCE

TASK FORCE MEETING #2 - September 26, 2017

Legislated Topics 4, 5 & 6 from Chapter 836



Infrastructure Efforts, Guidance, and Measures

Purpose:

Provide overview of Maryland's existing bicycle network, and related initiatives and guidance to improve it.

Presentation Outline:

- Assessments and Measures
- Policies and Guidelines



Bicycle Level of Comfort (BLOC)

- Based on national research-based methodology
- Criteria:
 - traffic volume
 - speed limit
 - presence of median
 - number of lanes
 - heavy vehicles
 - pavement width & quality
- Used since 2004, Updated in 2016

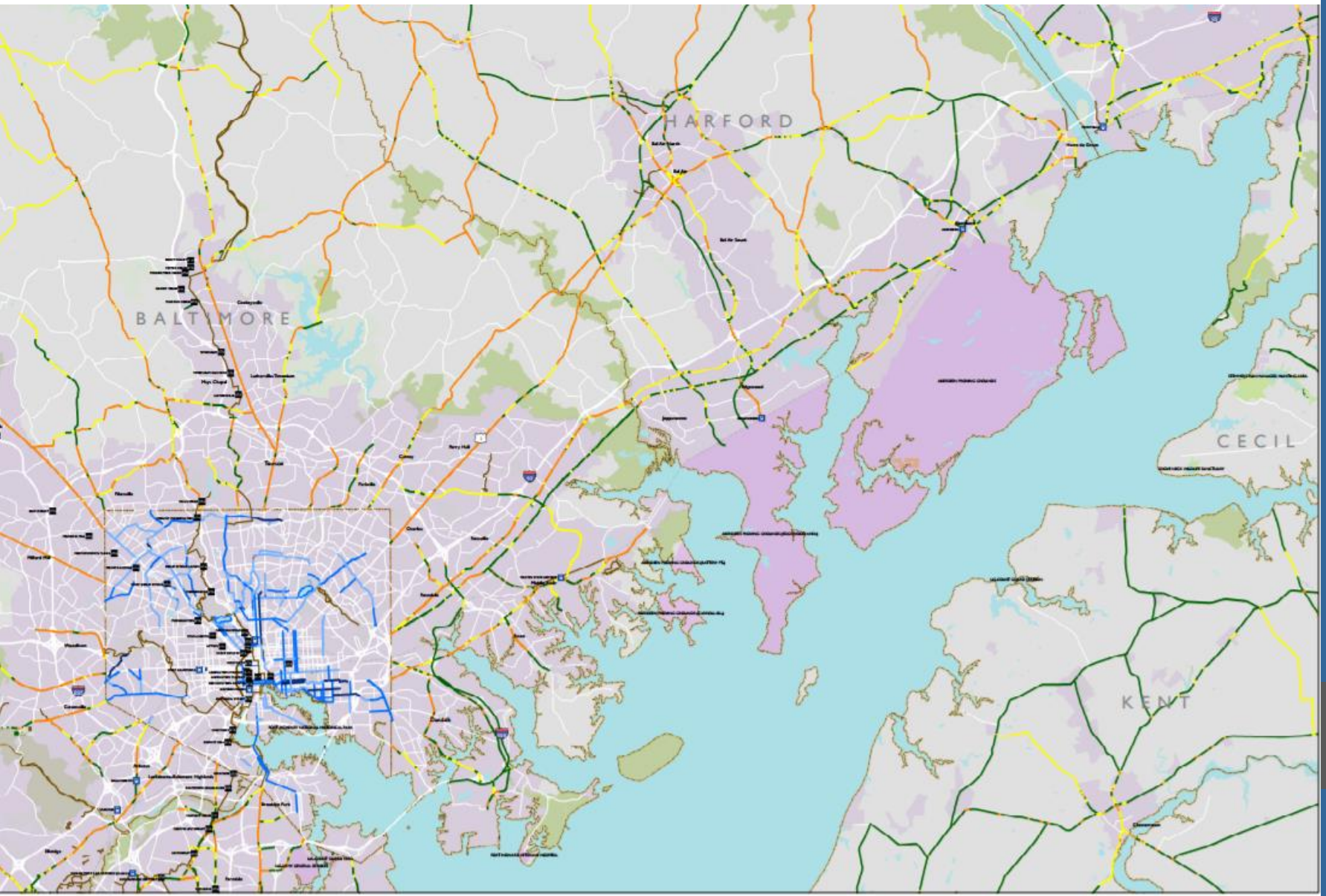
BLOC Grading	
A	≤ 2.0
B	$>2.0-2.75$
C	$>2.75-3.50$
D	$>3.50-4.25$
E	$>4.25-5.0$
F	>5.0

pass

fail



Bicycle Level of Comfort



Bicycle Level of Comfort

SHA works to achieve a level of D or better for at least 80% of eligible state roadways



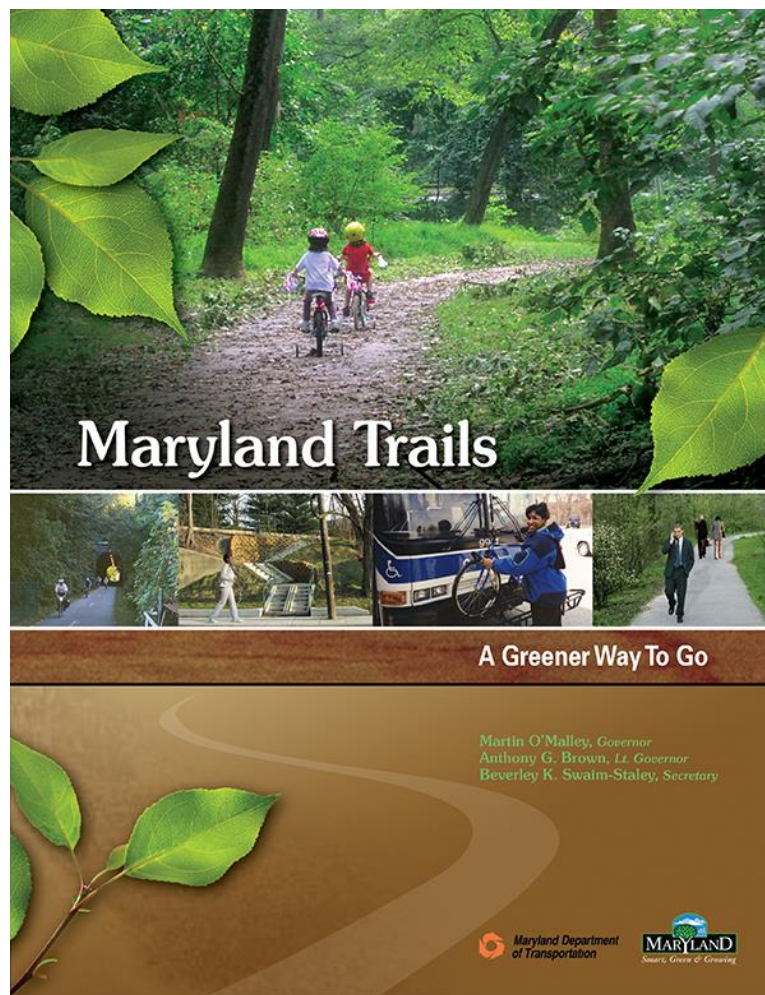
MDOT 2017 Attainment Report

MD Bicycle Safety Task Force Meeting 2

09/26/2017

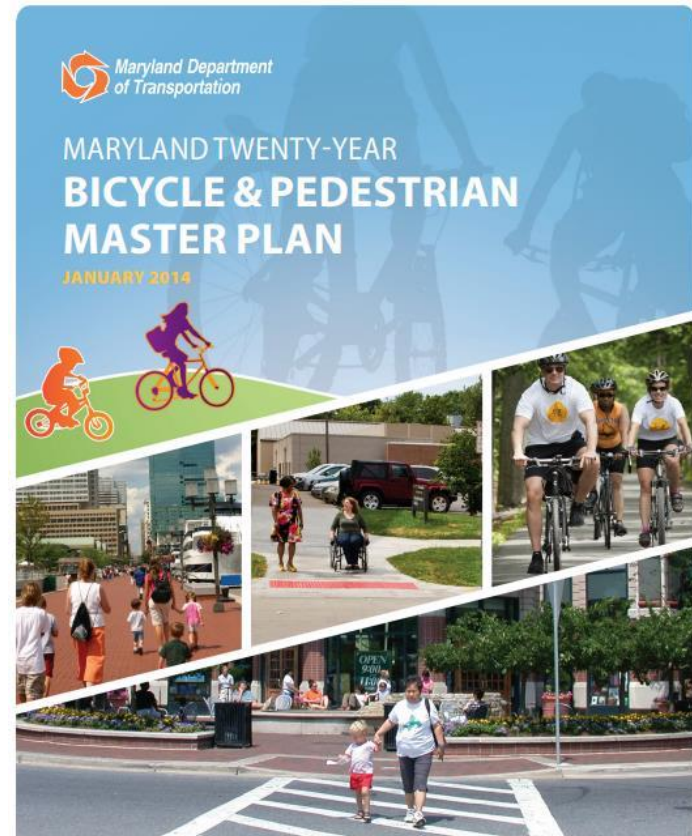
Transportation Trails Inventory

- Inventory of off-road transportation trails
- Identified gaps and highlighted priority needs



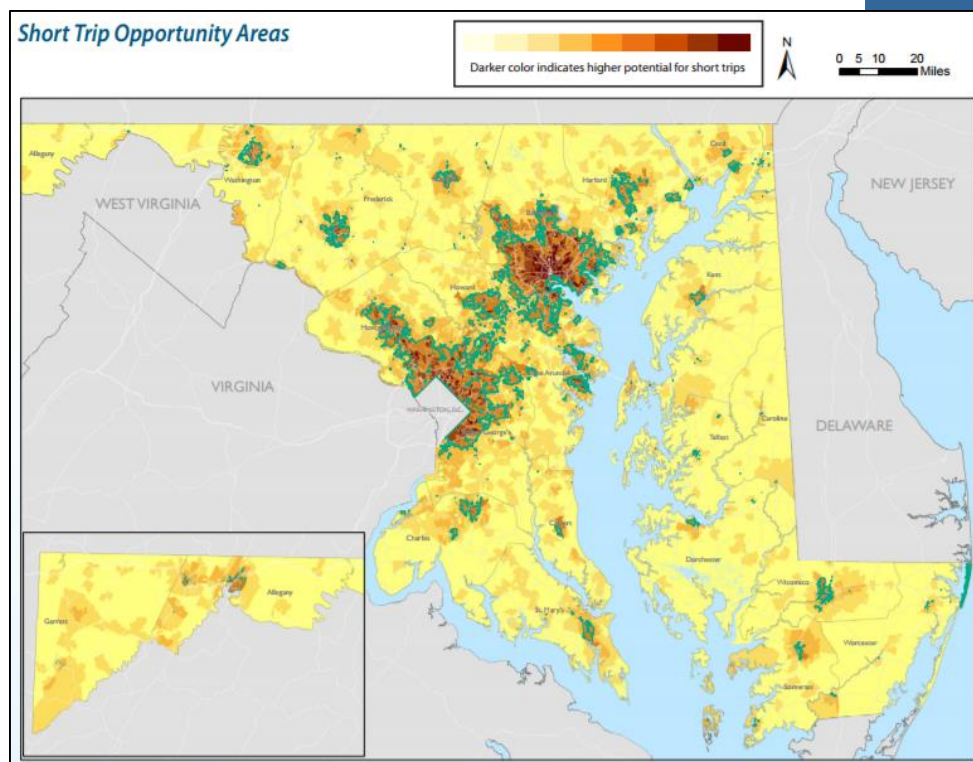
2014 Bicycle and Pedestrian Master Plan

- Unified approach:
 - On- and off-road
 - State and local
- Identified need to prioritize higher potential connections
 - Developed Short Trip Opportunity Areas
 - Identify Bicycle and Pedestrian Priority Areas



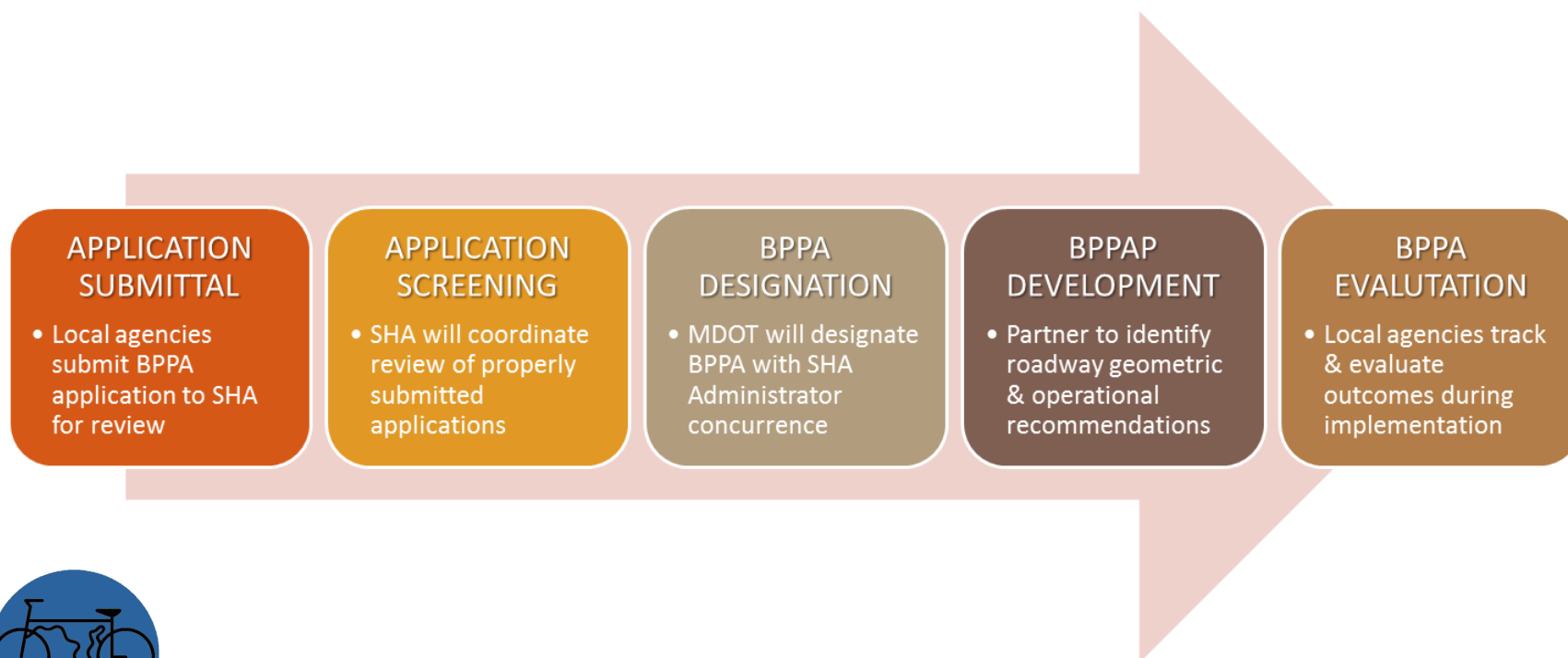
Short Trip Opportunity Areas

- Inform targeted approach to connect on road/off road – and state/local connections
- Criteria includes density of households, jobs, schools, transit stops & zero car households
- Covers 10% of state land and include 80% of crashes
- Identify areas with higher potential for biking/walking or where issues may exist – Informs BPPAs



Bicycle and Pedestrian Priority Areas

- Process: Locals designate areas. If area includes state highway, application with MDOT SHA review.
- Purpose: Collaborative approach for state/local coordination around bike/ped needs and opportunities.



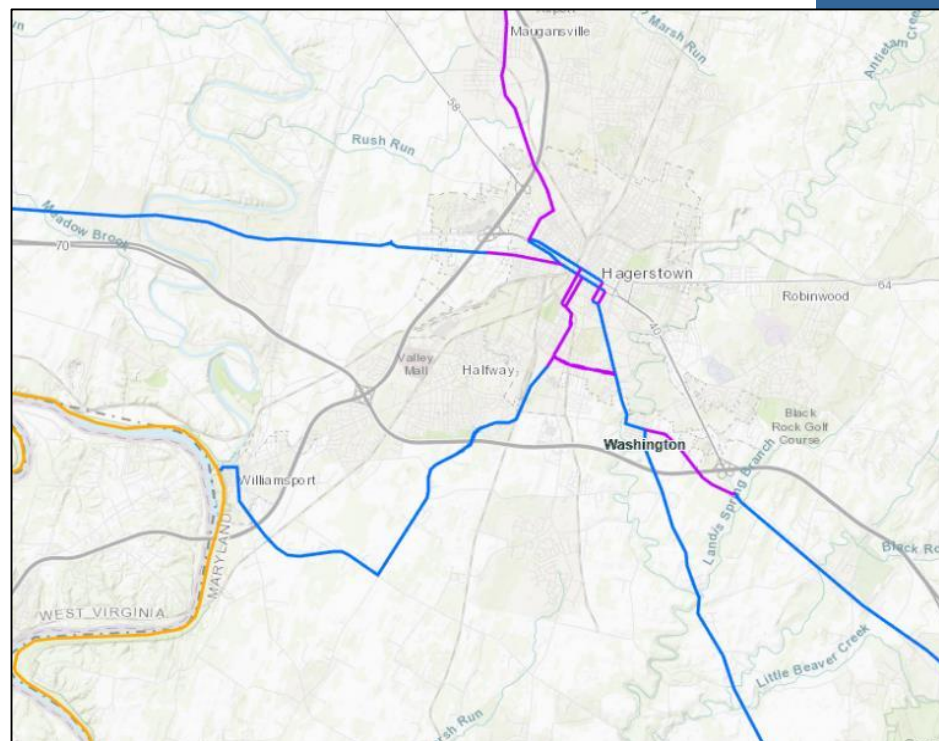
Annual Attainment Report and Performance Monitoring

- Includes tracking of:
 - # of bike fatalities and injuries
 - Bicycle Level of Comfort
 - Miles improved for bicycle access (Target: up 2% each year)
- Updated annually



MDOT SHA Bike Map: “Spine Network”

- Status:
 - Currently updating routes based on comments provided
 - Revisions Fall 2017
- Purpose:
 - Show best connection between major activity centers
 - Guide planning & construction
- Coordination with state & local agencies:
 - Comments, regional routes, points of interest
 - >150 comments received



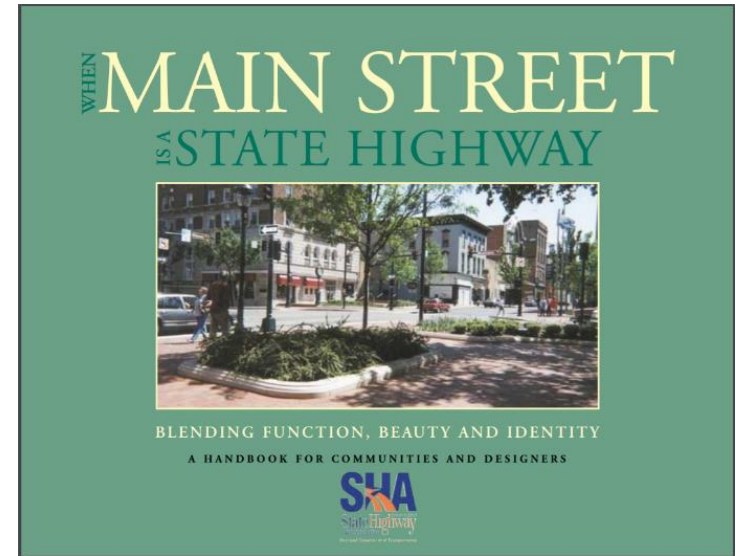
MDOT/SHA Draft Maryland Bike Spine Network

- Local Roads
- Paved Trail
- SHA Owned Roads
- Unpaved Trail



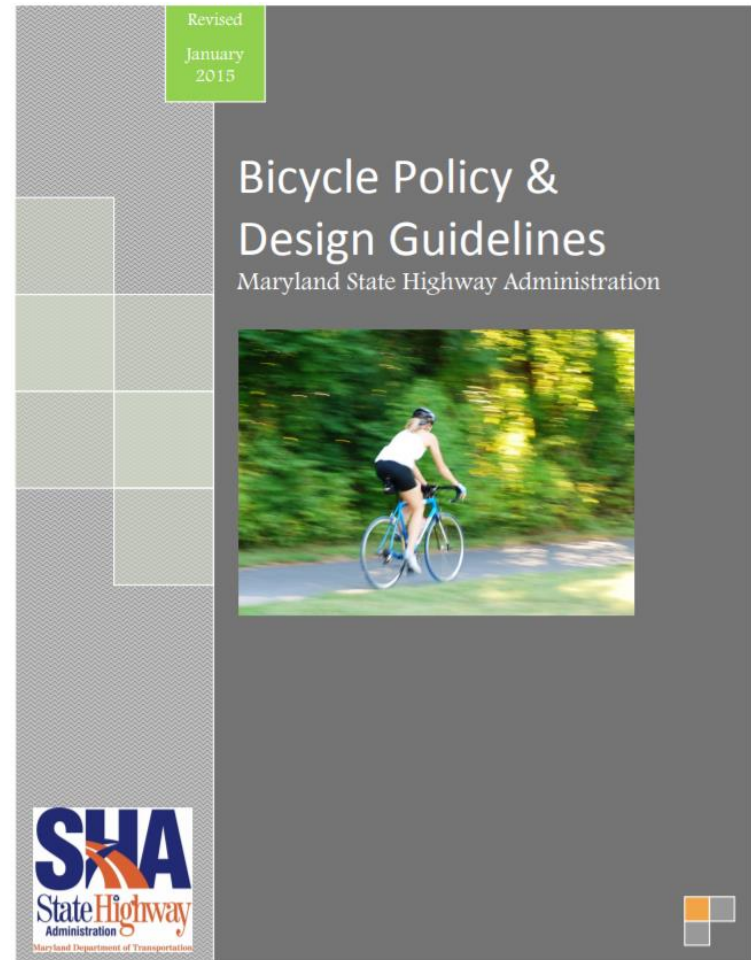
Policy Overview

- Context Sensitive Design:
 - SHA approach to inform design decisions
 - Focused on problems/solutions combined with cost/impact
- 2012 – Policy statement:
SHA will consider and incorporate complete streets criteria... and allow for exceptions
- Continual refinement of implementation strategies



Policy: Bicycle Policy Design Guidelines

- Adopted: 2013
- Revised: 2015
- Guidance for On-Road and Off-Road accommodations
- Clarifies policy implementation
- Prioritizes safety and efficiency for all users



Policy: Bicycle Policy Design Guidelines

Design guidance for:

- Bike lanes
- Shared Lanes
- Riding Surface and Roadside Features
- Bicycle Facility Transitions
- Bicycle Routes
- Shared Use Paths
- Bicycle Access at Interchanges and Bridges
- Accommodating Bicyclists through Work Zones
- Innovative Bicycle Design Features: Cycle Tracks, Buffered Bike Lanes, Bike Boxes

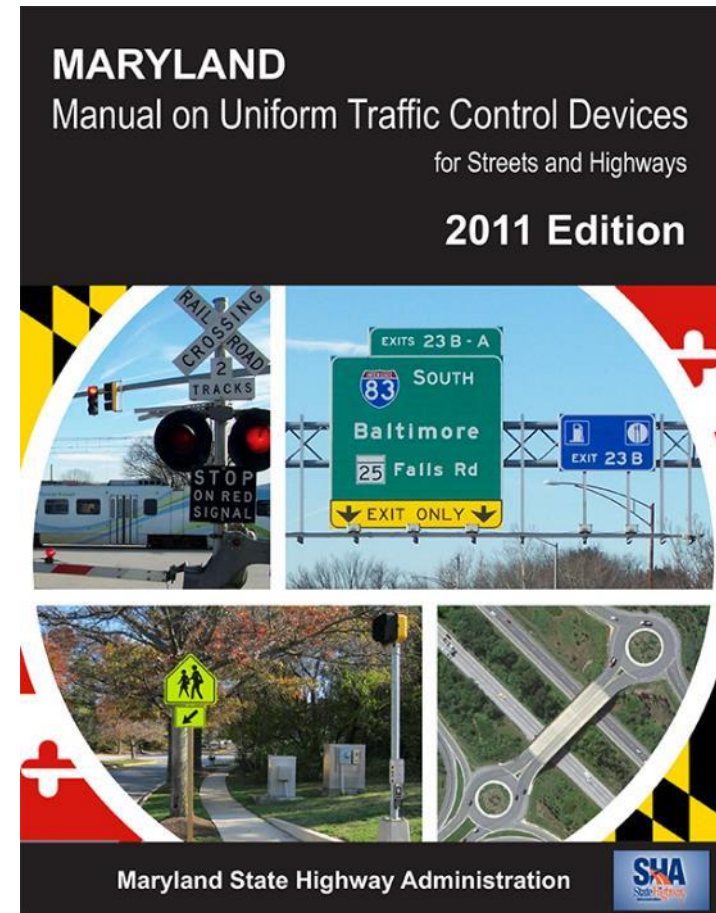
Table 2.1 – Marked Bike Lanes

MINIMUM SHOULDER WIDTHS FOR MARKED BIKE LANES		
POSTED SPEED LIMIT	TRUCK VOLUMES (%ADT)	SHOULDER/LANE WIDTH*
≤ 35 MPH	-----	4 FEET
> 35 MPH and ≤ 45 MPH	≤ 8% trucks	5 FEET
	> 8% trucks	6 FEET
> 45 MPH	-----	6 FEET



Maryland Manual on Uniform Traffic Control Devices (MUTCD)

- Establishes appropriate use of traffic control devices (signs, signals, etc.)
- Helps ensure consistency across the state and avoid confusion
- Contains modifications/customization of National MUTCD



Maryland Manual on Uniform Traffic Control Devices (MUTCD)

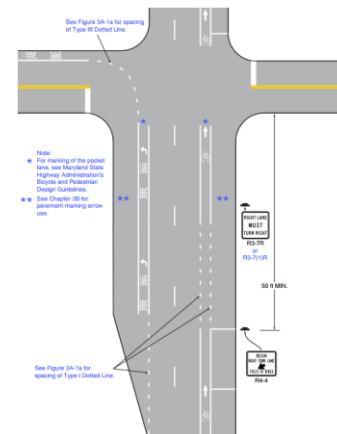
- Examples
 - Temporary Traffic Control
 - Traffic Control for School Areas
 - Traffic Control for Bicycle Facilities
 - Signs
 - Bike Lane Markings



“Where a crossing warning sign is used in advance of a pedestrian or bicycle crossing, an “AHEAD” or “XXX FEET” plaque shall be used with the sign.



D1-1(1)



Experimentation and Interim Approvals

All requests for any interpretation, permission to experiment, interim approval, or change shall be coordinated with MDOT SHA's Office of Traffic and Safety.



Experimentation (E) or Interim (I) Approval Treatments

Bicycle Boxes

I

Green-colored Pavement

I

Rectangular Rapid Flashing Beacons

I

Bicycle Signal Faces

I

Alternate Design for U.S. Bicycle Route Signs

I

Two-Stage Turn Boxes

I

Green-colored Pavement for Shared Lane Marking

E

Dashed Bicycle Lanes

E



Treatments Disallowed by FHWA



Photo Credit: Google Earth

Disallowed by FHWA

Establish bike lane from combined bicycle lane/turn lane	X
Green channelizing devices, delineators or retroreflective elements	X
Alterations for the shared lane marking symbols, including chevrons	X

Discussion: Infrastructure Efforts, Guidance and Measures

